

CASE STUDY — U.K. Manufacturing Facility (London)

Patented enPact FilterPro Delivers 13.0% Verified Energy Savings at a High-Load Manufacturing Site

INTRODUCTION

A London-based manufacturing facility operating extended production hours required a validated solution to reduce rising electricity costs without disrupting production. With heavy electrical loads driven by fabrication equipment, compressors, ventilation systems and site infrastructure, even small efficiency gains represented a significant financial opportunity. The site deployed patented enPact FilterPro power-alignment technology to assess performance before approving wider rollout.

SOLUTION

enPact FilterPro

The patented FilterPro system was installed to improve power quality and reduce non-productive electrical load by:

- Aligning voltage and current to reduce wasted kWh
- Minimising harmonics and electrical “noise”
- Improving efficiency across motors, compressors and ventilation systems
- Operating invisibly with no change to production workflows

Savings were validated using like-for-like comparable period analysis.

CHALLENGE

- High and continuous electrical demand from manufacturing equipment
- Electrical inefficiencies increasing wasted kWh consumption
- Requirement for independently verifiable results before wider rollout
- Need for zero downtime and no operational disruption
- Fast payback required to justify investment approval

RESULTS

Verified Site Performance

- **13.0% total energy reduction** 
- **274,539 kWh annual savings**
- **£49,417 annual financial savings** 
- **£135 daily savings**
- **5.36-month payback**
- **Quoted savings exceeded by 170%** 

| Metric | Quoted | Actual |
|--------------------------|-------------|-------------|
| Savings (%) | 7% | 13.00% |
| Annual kWh Saved | 160,419 kWh | 274,539 kWh |
| Annual Financial Savings | £28,875 | £49,417 |
| Payback | 9.17 months | 5.36 months |

CONCLUSION

Patented enPact FilterPro delivered a major, independently validated reduction in electricity consumption at this London manufacturing site. With a sub-6-month payback and results exceeding forecasts by a wide margin, the technology provides a powerful, scalable model for wider deployment across the client's manufacturing estate.

WIDER ESTATE IMPACT (2 SITES)

If the same performance were replicated across both manufacturing facilities:

- 549,078 kWh saved annually
- £98,834 annual financial savings
- Consistent 13% reduction per site
- Significant ongoing carbon reductions

INTERESTED IN ACHIEVING SIMILAR SAVINGS ACROSS YOUR ESTATE?

Get in touch to discuss validated energy-reduction opportunities and multi-site rollout potential.

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